

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number  
**WO 2004/108679 A1**

(51) International Patent Classification<sup>7</sup>: **C07D 215/18**

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(21) International Application Number:  
PCT/IN2003/000214

(22) International Filing Date: 6 June 2003 (06.06.2003)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,  
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,  
UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: AN IMPROVED METHOD FOR THE PREPARATION OF MONTELUKAST ACID AND SODIUM SALT THEREOF  
IN AMORPHOUS FORM

(57) Abstract: A method for the preparation of montelukast acid sodium salt thereof in amorphous form has been described. The method comprises of following steps: (a) generating the dilithium dianion of 1-(mercaptomethyl)cyclopropane acetic acid, by reacting with alkyl lithium, (b) coupling the said dianion with wet mesylate to get montelukast acid in crude form, (c) obtaining DCIA salt in crude form by adding dicyclohexylamine (DCHA) to crude acid obtained in the above step (b), (d) purifying and converting the said DCIA salt in crude form, to montelukast acid in pure form, and (e) reacting the pure montelukast acid in a polar protic solvent with a source of sodium ion followed by evaporating the solvent and triturating of the residue with non-polar water immiscible solvent.



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